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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,223	01/23/2001	Kazuhito Gassho	202165US2	3053
22850	7590	11/02/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAM, THIERRY L	
		ART UNIT	PAPER NUMBER	
		2624		

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/767,223	GASSHO ET AL.	
	Examiner Thierry L Pham	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 23 January 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/16/01, 10/2/01.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al (U.S. 6476930), and in view of Sorkin et al (U.S. 5898823).

Regarding claim 1, Roberts discloses a print job management apparatus (control station 108, fig. 1) that stores (storage, col. 6, lines 50-56) a plurality of print jobs sent from at least one print data generating apparatus (client computers 102, 104, 106, fig. 1) into a buffer and causes a printer to adequately carry out printing operations corresponding to the plurality of print jobs (plurality of print jobs, fig. 4), said print job management apparatus comprising:

(1) a job form decision unit configured to determine whether or not each print job of interest among the plurality of print jobs is said interactive print job (control station comprising print interface process 230 for determining whether the print job is an interactive print job, i.e., determine whether an incoming print job is encrypted in PostScript format or not is defined as "interactive print job" by the specifications, col. 8, lines 8-65).

However, Sorkin does not explicitly disclose the print job management apparatus comprising (1) stacks only predetermined data being set intrinsically to the interactive print job in a specific form without representing all drawing details of the print job; (2) establish mutual communication between said print data generating apparatus and said printer and carry out printing at a specific timing determined by stacking condition of said predetermined data.

Sorkin, in the same field of endeavor for printing, teaches (1) an input unit that (network server, fig. 8) stacks only (generates and extracts print job header from print job and stacks in byte string 62, fig. 4-6) predetermined data being set intrinsically (print job header incorporated within the print job, fig. 4) to the print job in a specific form without representing all drawing details of the print job (non-print data format/header only, fig. 4-6, col. 5, lines 8-45); (2) and an

unit configured to establish mutual communication between said print data generating apparatus (direct communication between client and printer, fig. 8) and said printer and carry out printing at a specific timing (printing is carried out upon receiving from the clients, fig. 8) determined by stacking condition of said predetermined data.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Roberts as per teachings of Sorkin because of a following reason: (1) to provide direct/mutual communication (bypass a spooling device) between client computer and printer to reduce transmission/processing time (Sorkin, col. 2, lines 35-42).

Therefore, it would have been obvious to combine Roberts with Sorkin to obtain the invention as specified in claim 1.

Regarding claim 2, Sorkin further discloses a print job management apparatus in accordance with claim 1, wherein said print data generating apparatus is connected with said printer via a network (network, fig. 8).

Regarding claim 3, Sorkin further discloses a print job management apparatus in accordance with claim 1, wherein the predetermined data set intrinsically (print job header is incorporated within the print job, i.e., print job ID header, fig. 4-5) in said interactive print job input unit is job information data, which includes at least information specifying that the print job of interest is the interactive print job (job header, fig. 4-6) and information specifying a print data generating apparatus that has transmitted the print job of interest.

Regarding claim 5, Sorkin further discloses a print job management apparatus in accordance with claim 1, wherein said interactive print job execution unit carries out printing (direct communication, fig. 8) not via said buffer.

Regarding claim 6, Roberts further discloses a print job management apparatus in accordance with claim 1, said print job management apparatus being incorporated in said printer (col. 6, lines 40-45).

Regarding claim 7, Sorkin further discloses a print job management apparatus in accordance with claim 2, wherein said job form decision unit carries out the determination, based on a communication protocol specified when the print job of interest is transmitted as packet data (fig. 4-5) via a network.

Regarding claim 9, Roberts further discloses a print job management apparatus in accordance with claim 1, wherein the interactive print job (determine whether an incoming print job is in Postscript format or not, col. 8, lines 10-65) is data that specifies a target image to be printed in a page description language (i.e., Postscript, col. 8, lines 5-50), which can be interpreted and executed by said printer.

Regarding claim 10, Sorkin further discloses a print job management apparatus in accordance with claim 1, wherein the interactive print job is data including a predetermined header, and said job form decision unit carries out the determination based on the predetermined header (header, fig. 4-6).

Regarding claim 11: Claim 11 is the method corresponding to the apparatus claims 1-9 (respectively). The methods are included by the operation of the apparatus. Please see claim rejection basis/rationale as described in claim 1 above.

Claim 12 corresponds to claim 1 except computer readable memory medium for storing program is claimed rather than printing system or data output apparatus. All computers have some type of computer readable memory medium (Sorkin, fig. 6) for storing computer programs, hence claim 12 would be rejected using the same rationale as in claim 1.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts and Sorkin as described in claim 1 above, and further in view of Roosen et al (U.S. 6618163).

Regarding claim 4, the combinations of Roberts and Sorkin do not expressly teach a print job management apparatus in accordance with claim 1, wherein said print job input unit outputs a

specific interruption signal to a print data generating apparatus, which is transmitting the print job of interest, to discontinue the transmission of the print job when it is determined that the print job of interest is the interactive print job.

Roosen, in the same field of endeavor for printing, teaches a print job management apparatus in accordance with claim 1, wherein said print job input unit outputs a specific interruption signal (interrupt mode, col. 6, lines 20-33) to a print data generating apparatus, which is transmitting the print job of interest, to discontinue the transmission (col. 6, lines 1-65) of the print job when it is determined that the print job of interest is the interactive print job (interrupting the interactive print job using interrupt mode, col. 6, lines 1-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Roberts and Sorkin as per teachings of Roosen because of a following reason: (1) interrupting the current print job for higher priority print job.

Therefore, it would have been obvious to combine Roberts and Sorkin with Roosen to obtain the invention as specified in claim 4.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts and Sorkin as described in claim 1 above, and further in view of Lawrence (U.S. 6665724).

Regarding claim 8, the combination of Roberts and Sorkin do not explicitly disclose the communication protocol is Appletalk.

Lawrence, in the same field of endeavor for communication, teaches communication protocol is Appletalk (fig. 5, col. 4, lines 8-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Roberts and Sorkin as per teachings of Lawrence because of a following reason: (1) provide users with an additional flexibility of using different protocols.

Therefore, it would have been obvious to combine Roberts and Sorkin with Lawrence to obtain the invention as specified in claim 8.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

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GABRIEL GARCIA
PRIMARY EXAMINER